

## PATENT ABSTRACTS OF JAPAN

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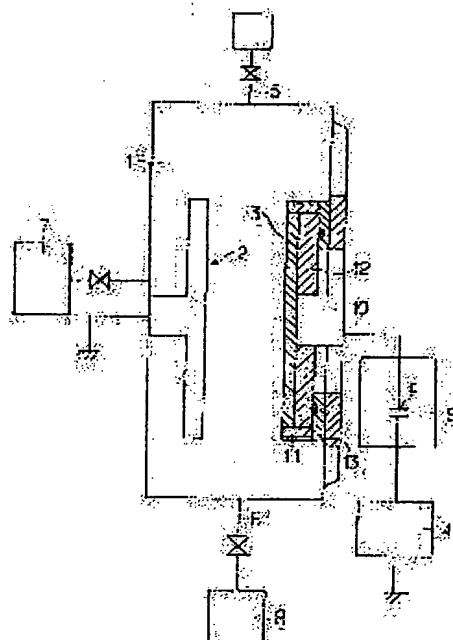
## (54) FORMATION OF THIN FILM BY PLASMA CVD METHOD

## (57)Abstract:

PURPOSE: To reduce ion bombardment time and to improve the quality of a thin film by disposing an earth electrode plate and discharge electrode plate to face each other in a vacuum chamber and impressing a square wave high-frequency voltage between both electrodes.

CONSTITUTION: The earth electrode plate 2 and the discharge electrode plate 3 are disposed to face each other in the vacuum chamber 1. The discharge electrode plate 3 is connected to a high-frequency power source 4 via a capacitor C for impedance matching. After the inside of the vacuum chamber 1 is evacuated by a high vacuum evacuation section 8, a reactive gas is introduced from a reactive gas

introducing part 5 into the chamber and is discharged from a reactive gas discharge part 8. The partial pressure of the reactive gas is adjusted. The square high-frequency voltage is impressed between the two electrodes 2 and 3 to generate a glow discharge between the electrode plates 2, 3 and a substrate for film formation. The ion bombardment time by cations is thereby reduced and the film of the deposited layer having the improved quality is formed on the discharge.



## LEGAL STATUS

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